

Date: Sun, 22 Aug 93 18:28:35 PDT  
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>  
Errors-To: Info-Hams-Errors@UCSD.Edu  
Reply-To: Info-Hams@UCSD.Edu  
Precedence: Bulk  
Subject: Info-Hams Digest V93 #1003  
To: Info-Hams

Info-Hams Digest                      Sun, 22 Aug 93                      Volume 93 : Issue 1003

Today's Topics:

>> LOOKING FOR DIGITAL RECEIVER <<  
    access to ARRL library  
    ANS-233 BULLETINS  
    Help!...RF Everywhere!  
    MFJ 1796 Multiband Vertical Review  
    Need information on duplexers  
    suggestions for tone-detector circuit  
VE vagaries. (Was: If I call FCC, can they tell me my callsign...)  
    Want Ten Tec OMNI elmer / help!  
    Which DSP Filter?

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>  
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>  
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available  
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text  
herein consists of personal comments and does not represent the official  
policies or positions of any party. Your mileage may vary. So there.

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Date: Sun, 22 Aug 1993 15:32:15 GMT  
From: swrinde!cs.utexas.edu!asuvax!ncar!csn!teal.csn.org!kenw@network.ucsd.edu  
Subject: >> LOOKING FOR DIGITAL RECEIVER <<  
To: info-hams@ucsd.edu

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Date: Sun, 22 Aug 1993 16:16:34 GMT  
From: usc!howland.reston.ans.net!vixen.cso.uiuc.edu!uwm.edu!rpi!utcsri!  
newsflash.concordia.ca!mizar.cc.umanitoba.ca!mona.muug.mb.ca!  
dwjhay@network.ucsd.edu

Subject: access to ARRL library  
To: info-hams@ucsd.edu

Hello, I am trying to gain access to the ARRL library of information. I am the current newsletter editor of our local Ham clubs (the Winnipeg Amateur Radio Club, and the Manitoba Repeater Society) in VE4 land. I would like to have access to ARRL so that I can view and reprint articles (with permission of course) in our newsletter.

Our club is a member of RAC (formally CRRL, and CARF) and a lot of our members are also members of ARRL.

If anyone know how I can access the ARRL library of info please send me a e-mail on this subject. Also if anyone wants to exchange newsletters please let me know that as well.

73

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Derek W. J. Hay	E-mail	dwjhay@muug.mb.ca
51 St. Hilaire Place		derek@facswpg.muug.mb.ca
Winnipeg, MB CDN	Ham Packet:	VE4HAY@ve4kv.#wpg.mb.can.noam
R2J 4B5	Work:	204-943-5401
	Home:	204-257-1420
	Data:	204-254-7417

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Date: 22 Aug 93 18:17:23 GMT  
From: news-mail-gateway@ucsd.edu  
Subject: ANS-233 BULLETINS  
To: info-hams@ucsd.edu

SB SAT @ AMSAT \$ANS-233.01  
MORE INFO ABOUT OSCARS

HR AMSAT NEWS SERVICE BULLETIN 233.01 FROM AMSAT HQ  
SILVER SPRING, MD AUGUST 21, 1993  
TO ALL RADIO AMATEURS BT  
BID: \$ANS-233.01

KITSAT-B: First Independently Built Korean Satellite

AMSAT-NA would like to correct a bulletin a few weeks ago with respect to

KITSAT-B. The KITSAT-B satellite was NOT built at the Univeristy of Surrey but at the Korean Advanced Institute of Science and Technology (KAIST). The satellite was built entirely in Korea using an all-Korean team. Members of this team were trained at Surrey and built KITSAT-A (now known as UO-22) at Surrey; however KITSAT-B is a completely Korean effort. This independent effort is considered to be an important phase in the educational "technology transfer" between Surrey and KAIST.

#### POSAT-1: Possible Opportunities For Amaetur Experimentation

PoSAT-1 was built at Surrey by SSTL staff and a team of 4 engineers seconded from Portugese industry. PoSAT-1 has been built as a technology-transfer project between SSTL and a consortium of Portugese aerospace companies. The satellite carries an Earth imaging camera, a CCD Star sensor, a Trimble GPS receiver and a digital signal processing experiment with TMS320C25 and TMS320C30 processors. The standard on-board computer supporting standard PACSAT protocols will also be provided.

Although its primary mission is outside the amateur bands, Surrey is negotiating with the Portugese industrial consortium for PoSAT to operate in the amateur bands part of the time. Such part time amateur access would allow standard UoSAT-OSCAR-22 equipped stations to receive pictures from the camera and data from the GPS experiment. It is also possible to provide high speed modulation through the DSP system, which will allow radio amateurs to develop the necessary RF and digital techniques to go beyond 9600 baud.

The PoSAT camera has the same optics as the KITSAT-A camera, but since PoSAT is to be at half of the altitude of KITSAT, resolution should be doubled. The narrow-angle camera should produce 200 meter resolution. Standard PACSAT Broadcast Protocol techniques will be used to download the images. The amateur community will be kept informed as negotiations with the Portugese Consortium continue. Mail from radio amateurs who think they might be interested in receiving PoSAT-1 in the amateur bands would be appreciated and might help in conducting these discussions. Please send your comments and suggestions to the following address:

Jeff Ward, K8KA/G0SUL  
Surrey Satellite Technology  
University of Surrey UoSAT Unit  
Guildford, Surrey GU2 5XH  
England

Or via Internet: [k8ka@AMSAT.org](mailto:k8ka@AMSAT.org)

[The AMSAT News Service (ANS) would like to thank Jeff Ward K8KA/G0SUL for the information used in this bulletin.]

/EX

SB SAT @ AMSAT \$ANS-233.02

PHASE-3D STATUS REPORT

HR AMSAT NEWS SERVICE BULLETIN 233.02 FROM AMSAT HQ

SILVER SPRING, MD AUGUST 21, 1993

TO ALL RADIO AMATEURS BT

BID: \$ANS-233.02

#### WD4FAB Provides Latest Phase-3D Status Report & Request For Assistance

Dick Jansson (WD4FAB) AMSAT-NA VP for Engineering, reports that the assembly of the Engineering Structural Model for Phase 3-D is now nearing completion in Germany. As many of you know, Dick, along with a team from Weber State University, has been working on this critical task for the past month with Dr. Karl Meinzer (DJ4ZC) and Werner Haas (DJ5KQ) of AMSAT-DL. Their goal has been to confirm the form, fit and function of structural designs for the new satellite. Dick says that the effort has been a tremendous learning experience for all. It has also given everyone involved a much clearer vision of where and how we must proceed in the months to come in order to be ready for launch in 1996.

As this stage of the development draws to a successful close, and as a direct result of the process, Dick now foresees that some additional, and immediate, machining expertise for the spacecraft thermal structure will be required beyond that already being expertly provided by our Weber State University people. He's asked that an urgent request be made for some additional help with machining some of the structural parts for the spacecraft.

Anyone with "hands on" machining experience, particularly in the milling and fine finishing of metal parts, and who also has both the spare time and use of facilities to donate to the Phase-3D cause are welcome to volunteer. Anyone who would like to help, or knows of someone who can, please contact Dick Jansson (beginning August 24th) at (407) 644-9008, or fax him at (407) 644-9782.

[The AMSAT News Service (ANS) would like to thank Dick Daniels (W4PUJ) for the information used in this bulletin.]

/EX

SB SAT @ AMSAT \$ANS-233.03

AMSAT OPS NET SCHEDULE

HR AMSAT NEWS SERVICE BULLETIN 233.03 FROM AMSAT HQ

SILVER SPRING, MD AUGUST 21, 1993

TO ALL RADIO AMATEURS BT

BID: \$ANS-233.03

## Current AMSAT Operations Net Schedule For AO-13

AMSAT Operations Nets are planned for the following times. Mode-B Nets are conducted on AO-13 on a downlink frequency of 145.950 MHz. If, at the start of the OPS Net, the frequency of 145.950 MHz is being used for a QSO, OPS Net enthusiasts are asked to move to the alternate frequency of 145.955 MHz

Date	UTC	Mode	Phs	NCS	Alt NCS
28-Aug-93	1830	B	157	WJ9F	VE2LVC
11-Sep-93	0730	B	159	VE2LVC	W90DI
18-Sep-93	1515	B	96	N7NQM	W5IU

Any stations with information on current events would be most welcomed. Also, those interested in discussing technical issues or who have questions about any particular aspect of OSCAR statellite operations are encouraged to join the OPS Nets. In the unlikely event that either the Net Control Station (NCS) or the alternate do not call on frequency, any participant is invited to act as the NCS.

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## Slow Scan Television on AO-13

SSTV sessions will be held on immediately after the OPS Nets a downlink on a Mode-B downlink frequency 145.960 MHz.

/EX

SB SAT @ AMSAT \$ANS-233.04  
WEEKLY OSCAR STATUS REPORTS

HR AMSAT NEWS SERVICE BULLETIN 233.04 FROM AMSAT HQ  
SILVER SPRING, MD AUGUST 21, 1993  
TO ALL RADIO AMATEURS BT  
BID: \$ANS-233.04

Weekly OSCAR Status Reports: 21-AUG-93

## AO-13: Current Transponder Operating Schedule:

L QST \*\*\* AO-13 TRANSPONDER SCHEDULE \*\*\* 1993 Aug 14-Oct 25

Mode-B : MA 0 to MA 60 !

Mode-BS : MA 60 to MA 120 !

Mode-S : MA 120 to MA 145 !<- Mode-S transponder; B transponder is OFF

Mode-S : MA 145 to MA 150 !<- Mode-S beacon only

Mode-BS : MA 150 to MA 210 ! Blon/Blat 180/0

Mode-B : MA 210 to MA 256 !

Omnis : MA 170 to MA 15 ! Move to attitude 210/0 25-Oct-1993  
Continuous up-to-date information about AO-13 operations is always available on the beacons at 145.812 MHz and 2400.646 MHz in CW, RTTY and 400 bps PSK. Also, these bulletins are also posted to INTERNET, ANS bulletins, Packet, PACSATs, etc., and can also be found in many international newsletters. [G3RUH/DB20S/VK5AGR]

RS-10: WB2WPA reports excellent results at his QTH with RS-10. He notes that he has worked 12 states and a number of VE provinces in casual operating over the past few weeks. He installed an Advanced Receiver Research (ARR) 10M preamp, and he saw his signals rise to S-9+. Also, WB2WPA has seen good "over-the-horizon" results for about 1 minute before AOS and after LOS recently running 80 watts to a 15 element beam with horizontal polarization. Also, WC9C reports that the RS-10 transponder is working just fine. With the Solar Flux dropping below 100, Mode-A signals even during the day light hours are fairly strong. The transponder activity was very high last week with at least 3 DX stations heard. There was no message on the telemetry beacon this week, and the CW Robot was also working just fine. [WB2WPA & WC9C]

RS-12: GM4IHJ has been copying RS-12 well into the evenings in the UK while it is "sub-horizon" at the terminator over UA0. He notes that it is well worth the time for RS-12 operators to be looking for the satellite long before AOS and long after LOS and even on "out of range" passes to the north. If you can hear the 29.407 MHz beacon the chances are that the satellite transponder will hear your 21.210 - 21.250 MHz uplink. WC9C reports that RS-12 Mode-K transponder is working fine with lots of activity. With 15M dropping off as the solar flux falls, he says that there is a lot less interference to the Mode-K uplink passband. At the end of the telemetry frame there was this test message which said: "Test test test RS3X QTH Kaluga" [GM4IHJ/G3IOR & WC9C ]

AO-16: Operating normally. [WH6I]

UO-22: Operating normally. [WH6I]

KO-23: Operating normally. [WH6I]

The AMSAT NEWS Service (ANS) is looking for volunteers to contribute weekly OSCAR status reports. If you have a favorite OSCAR which you work on a regular basis and would like to contribute to this bulletin, please send your observations to WD0HHU at his CompuServe address of 70524,2272, on INTERNET at wd0hhu@amsat.org, or to his local packet BBS in the Denver, CO area, WD0HHU @ W0LJF.#NECO.CO.USA.NOAM. Also, if you find that the current set of orbital elements are not generating the correct AOS/LOS times at your QTH, PLEASE INCLUDE THAT INFORMATION AS WELL. The information you provide will be of value to all OSCAR enthusiasts.

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Date: 23 Aug 93 01:12:05 GMT  
From: usc!news.service.uci.edu!ucivax!gateway@network.ucsd.edu  
Subject: Help!...RF Everywhere!  
To: info-hams@ucsd.edu

Hi Marc:

I sent this to your personal address 5 days ago, it never made it.  
Here goes to the board. Some of it has been said, maybe some of it  
will help.

First, I would try to take out the air balun you have between the rig  
and the tuner. This is not needed, and just may create some extra RF  
paths. Make yourself a SHORT jumper of RG-8 for the rig into the tuner.  
This is how the system is designed to work.

Second, try to improve the ground in one of several ways:

- run an extra ground rod or two into the ground.
- shorten all ground leads and eliminate extension cords where possible.
- create RF counterpoise, use quarterwavelengths of wire attached to the  
ground terminal of the tuner on each band you will use and run them out  
under the carpet or into the yard or something.
- shield the heck out of the outboard processor (why don't you use the internal  
one, BTW? Its not real great, but not bad at all!)
- shield keyer leads and power supply leads (and shorten) the best you can
- pray at the right church (I am not sure about this method, but it seems to  
work for many people :-)

73, and I have cured problems just like this...take heart, it can be done.

Clark

.....

Clark Savage Turner, Graduate Student Researcher  
Safety Critical Software Group home:  
Department of Info. and Computer Science 1514 Verano Place  
Irvine, CA. 92717 Irvine, CA. 92715  
(714) 856 4049 (714) 856 2131

WA3JPG, QRP #3526, active on HF, VHF and UHF.  
Admitted to practice law in California, Massachusetts, and New York.  
ARRL Volunteer Counsel

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Date: 22 Aug 93 22:21:07 GMT

From: concert!gatech!howland.reston.ans.net!agate!deep.rsoft.bc.ca!mindlink.bc.ca!  
a3853@RUTGERS.EDU

Subject: MFJ 1796 Multiband Vertical Review

To: info-hams@ucsd.edu

Having recently purchased the new MFJ 1796 compact multiband HF vertical, I have had LOTS of inquiries about this antenna. There is allot of interest in this antenna but not many product reviews in the ham mag's. Here is my personal review for those that are interested. Assembly: The antenna took about six months to get here. When it arrived it was well packaged and even included extra parts, such as nuts, bolts, screws, washers and even radials. That was a pleasant surprise because I inevitably loose parts when I am assembling anything:) The clear step by step instructions come complete with plenty of illustrations. The antenna itself went together in a few hours without any difficulty. MFJ did a fine job in this department. Tuning the antenna was a bit of a challenge. There are small (ie 8 - 20 inch) radials that protrude from the top and bottom of the antenna. These radials are trimmed until the antenna is resonant at the desired frequency. This is not a difficult or complex procedure but it does require trimming the top and bottom elements with the antenna on the ground . . . then rasing the antenna into the vertical position and testing . . . then lowering the antenna and trimming another 1/4 inch and so on until the desired freq. is achieved. This process is repeated for each band. Fortunately the antenna is not heavy, just awkward. It can be raised and lowered by a single person. Given the design of the antenna I don't think there is any alternative. I might also mention that I used the MFJ SWR analyzer for this procedure and it worked extremely well. I was able to achieve 1.5:1 on all bands' 10 - 40. The bandwidth of the antenna is excellent on 10, 15, and 20 meters. As one would expect in a compact antenna the bandwidth is very narrow on 40 meters. If the antenna is resonant at 7.100, the SWR will be less than 2.0:1 from 7.090 - 7.110. A tuner would be advised if operating on 40 meters. Other than 40 m, I can operate all bands without a tuner as the SWR is less than 2.0:1 all across 10 and 15m. On 20 meters I am less than 2.0:1 from 14.040 - 14.210. Naturally the freq's I have mentioned are set for my preferences the resonant freq's of the antenna can be set anywhere in the band.

Operation: I conducted an A/B comparison between the MFJ and a simple dipole. If you were hoping for beam like performance . . . sorry to disappoint you but you better look elsewhere. This is a compact antenna designed for those of us who have small lots or restricted space for antennas. On receive the antenna was typically 1-3 S units stronger than the dipole. Most of the time the difference was so slight I had to constantly switch from one antenna to the other to discern any difference. However, on some weaker signals the MFJ did outperform the dipole. The MFJ, being a vertical, is quite noisy in comparison to the dipole so while the dipole signal was not as strong it had



less background noise. The transmitted signal was tested by contacting several stations in Canada and the US. Sorry, with the lousy band conditions I couldn't contact any DX stations YET! The stations consistently reported a stronger signal with the MFJ. They said it was not a significant difference but that it was noticeable.

Problems: I did discover a flaw in the design of the antenna. My SWR, which had been excellent, suddenly seemed to jump to 3:1 and higher on 20 meters. The other bands were all fine. This only occurred when it rained or had been raining. I contacted MFJ by phone and they said they are aware of the problem and would send me something to solve it. Within a few days I received four black plastic caps. MFJ says the problem occurs when water accumulates inside the loading coil assembly, and that placing these caps on the ends will solve the problem. This does seem to have corrected the problem.

Overall Impression: The MFJ is a good antenna if you can't or don't want to put up a beam. It is inexpensive compared to the other no radial antennas and does a good job. I would like to hear a comparison with the Cushcraft R7. I suspect they would be similar. This antenna is ideal for condo's, small lots or restricted property, RV's, or apartments if you can mount it in the clear.

If you have any specific questions please contact me via e-mail. By the way I don't work for MFJ. The above is just MY opinion.

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*****
Jim Sollows                Internet: JIM_SOLLOWS@MINDLINK.BC.CA
Agape Data Solutions       Packet: VE7JLS@VE7KIT.#VANC.BC.CAN
                           Compuserve: 72772,201
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Date: Wed, 18 Aug 1993 10:17:25 GMT  
From: munnari.oz.au!spool.mu.edu!sol.ctr.columbia.edu!destroyer!  
newsrelay.iastate.edu!news.iastate.edu!jdwhite@network.ucsd.edu  
Subject: Need information on duplexers  
To: info-hams@ucsd.edu

I would like to learn more about duplexers and how to maintain and "configure" them. Any suggestions on where I might look for some good information. I looked in the '92 Handbook, but all I found was a paragraph on what duplexers were; nothing on how to maintain them.

-Jason White, NØRWU  
Repeater Chairman, WA0KHF Repeater  
Cyclone Amateur Radio Club  
Iowa State University

Ames, Iowa

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Date: Mon, 16 Aug 1993 18:50:22 GMT  
From: mcsun!sun4nl!bsoatr!bsrofa!rob@uunet.uu.net  
Subject: suggestions for tone-detector circuit  
To: info-hams@ucsd.edu

Stephen Anthony Chinatti (chinatti@phoenix.Princeton.EDU) wrote:  
: I am looking for advice on building a circuit that I can use to decode  
: 2-tone sequential alert tones (i.e. Motorola Quick-Call II) off of the  
: audio output of a receiver. I tried out the NE567 PLL tone detector,  
: but it just doesn't have the center frequency stability OR the narrow  
: bandwidth that I am looking for. I guess I'll have to move up a step  
: and look into some kind of active filter (bandpass) that is tuned to  
: peak at the frequency of the tone I am trying to detect, with a pretty  
: high Q so I don't get false activation. My first question is does  
: anyone have any suggestions on a good (possibly active filter, maybe  
: something else) IC that can be used for this type of application? I  
: would like to keep the complexity/number-of-components/cost low, but  
: that is not a HUGE concern. Also, is anyone familiar with the scheme  
: that Motorola uses for their Minitor (or similar) series pagers for  
: tone-decoding?

: Thanks in advance,  
: Steve  
: --  
: ---  
: Steve Chinatti, EMTA, EECS student, Princeton University, Princeton, NJ  
: internet:chinatti@phoenix.Princeton.EDU bitnet:chinatti@pucc.bitnet

You could use a micro processor to detect the tones. I succesfully built a  
12 tone decoder 5 tones sequence with a simple 68705G2 micro.  
Very low component count etc. only programming needed.

The algorithm is as follows:  
for a certain tone you store the period time. When signal comes in  
measure periode duration with the timer. You can also store the  
number of periods you want to be able to check the right tone duration.  
For a less then ideal signal to noise generation the following helps.  
The period you measure can have a variance depending on the noise level.  
This gives a litle off-set to the possible values and makes you able to  
discriminate between a wanted signal and another signal. Because of the  
fact that the sum of a certain amount of periods must equal a value with  
a tolerance for a certain bandwidth, a succesful detection is possible  
with a not ideal s/n ratio. The ratio which the algorithm can cope  
varies with the number of periods of the wanted freq as well as the

wanted false alarm rate.

Succes,

Robert, PA2JOB.

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Robert Faass                      Email:    rob@bsrofa.atr.bso.nl  
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Date: 22 Aug 1993 23:22:02 GMT  
From: swrinde!cs.utexas.edu!math.ohio-state.edu!magnus.acs.ohio-state.edu!  
ksamPATH@network.ucsd.edu  
Subject: VE vagaries. (Was: If I call FCC, can they tell me my callsign...)  
To: info-hams@ucsd.edu

In article <252l2c\$j4r@charm.magnus.acs.ohio-state.edu> I had written:

>  
>    i am planning to take my general this sunday. right now, i am  
>    waiting for my tech+ new call also. i took that test on july 10  
>    (six weeks ago). after i pass my general, do i go back to waiting  
>    for another 8 weeks or do i get my new ticket in 2 weeks (aprox.)?  
>  
>    i guess what i really want to know is, what happens to my 610 at  
>    fcc, when another 610 arrives with new information.  
>

well, i passed my 3b, 4a, and 4b elements in a \*arrl\* test session.  
1c, the 20 wpm test was a different story. halfway into the test,  
the ve's stoppped it, told me that it was the wrong tape, and  
restarted the test. i simply could not copy any more, and failed 1c.

right now, i have my novice call, and csce's upto advanced. my new  
tech+ callsign should be here in about three weeks. these ve's did  
\*not\* want to hear about the tech+. i was told firmly that, they would  
\*not\* hold my application till i got my new callsign (n8???), and  
that in about 8 weeks time from today, when this new 610 with all  
credits upto advanced ticket gets processed, i get \*another\*  
callsign. this was even after my trying to convince them to hold my  
papers for three weeks until i get my new ticket and my 1c credit!

so, now, thanks to the delay in processing by the fcc, everything is  
going to work ok.....but, needless to say, i am a bit disappointed  
at all this confusion, and one tech/general callsign going waste  
after about 5 weeks of use..... not to mention another \$5.60....

73 es cul,

krishna  
kb8fav/aa

ps: i guess i will just have to become a ve myself :-)

pps: i can't wait to get on the air with all the tremendous hf band  
width available now.... well, actually i want that bottom 25 kHz too!  
:-)

--  
krishna s. sampath, phd....sr. research associate...kss@lenz.eng.ohio-state.edu  
ohio state u, electroscience lab.....(614) 292-7981 (w).....(614) 292-7297 (f)  
1320 kinneer rd, columbus, oh 43212....06/93 EE PHD NEEDS EMI/EMC/COMPUTING JOB  
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Date: 22 Aug 93 20:39:44 GMT  
From: swrinde!elroy.jpl.nasa.gov!news.claremont.edu!ucivax!  
gateway@network.ucsd.edu  
Subject: Want Ten Tec OMNI elmer / help!  
To: info-hams@ucsd.edu

Anyone out there familiar (or want to become familiar) with the older  
OMNI ? I have an OMNI-D series C, the precursor to the Corsair. I  
am having some funny (read: hard to diagnose) problem that is driving  
me completely nuts.

Briefly, I have 50 db less receive on ONE band only. 160 meters is  
way down, all the other bands seem OK, they may be down a little,  
but not much. The "resonate" control (preselector) will peak in the  
160 meter band, but it peaks much higher towards the bottom of the  
160 range, and loses sensitivity rapidly above 1.8. The receive antenna  
seems to come through the pin diode attenuator (which seems to work  
normally....) and then to the RX trimmer board with some fixed caps  
and a trimmer cap. I have replaced the 160 meter caps. It is not  
them. Then the signal goes to the RF amp which seems to be a parallel  
tuned inductance for adjustment

I know the problem has to be in there, for when I connect the antenna to  
the mixer directly, I have plenty of signal on 160 (perhaps the solution  
is to wire the antenna directly there for 160, hi hi).

So, how does a pin diode work for an attenuator? Is leakage on one  
frequency possible? AND, could the parallel tuned inductors have come  
out of sync in such a way as to affect only 160 at one end of the band?

.....help!!!! I really like the radio a lot, and I want to use it  
on 160 as well as all the other bands.

73

Clark

.....

Clark Savage Turner, Graduate Student Researcher  
Safety Critical Software Group home:  
Department of Info. and Computer Science 1514 Verano Place  
Irvine, CA. 92717 Irvine, CA. 92715  
(714) 856 4049 (714) 856 2131

WA3JPG, QRP #3526, active on HF, VHF and UHF.  
Admitted to practice law in California, Massachusetts, and New York.  
ARRL Volunteer Counsel

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Date: 22 Aug 1993 15:09:02 GMT  
From: usc!howland.reston.ans.net!spool.mu.edu!olivea!inews.intel.com!  
ilx018.intel.com!ilx049!dbraun@network.ucsd.edu  
Subject: Which DSP Filter?  
To: info-hams@ucsd.edu

Looking through QST ads, I see these moderately-priced  
DSP audio filters for sale:

Timewave Technology DSP-9	\$149
JPS NRF-7	\$250
j-com w9gr DSP 2	\$299
W9GR Kit	\$125

Can anyone tell me the pros and cons of these units?

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Date: (null)  
From: (null)  
Thanks,

Doug Braun (N10WU)

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Email: dbraun@inside.intel.com  
Intel Mail: IDC1-41  
iNet: 8-435-5069 Long Distance: 011-972-4-655069

Fax: 8-435-5999  
Snail Mail: US:  
PO Box 311  
Mendham, NJ 07945

Long Distance: 011-972-4-655999  
Other:  
Intel Israel, Ltd.  
IDC1-41  
Matam Scientific Center  
Haifa, Israel 31015

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End of Info-Hams Digest V93 #1003

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